

## REMARKS

In the above-noted Office Action, Claims 1-26, 28, 30-44 and 46-58 have been allowed. Dependent Claims 27, 29, 45 and 59 have been objected to and rejected on various grounds.

First, Claims 27, 29, 45 and 59 were objected to for being improper dependent claims under 37 CFR 1.75(c) in that such claims fail to limit the subject matter of the previous claim. It is requested that this objection be withdrawn.

Claims 27, 29, 45 and 59 are all product-by-process claims which claim a "sheet" in accordance with the process set forth in the claim from which they depend. This form of claim is specifically authorized in Ex parte Pattzer, 176 USPQ 141 (BD of App 1972) which is cited in the section of the MPEP dealing with product-by-process claims - MPEP at 2173.05(p). One set of claims at issue in that case included Claims 20, 23, 24 and 25 which are all product-by-process claims that depended from process claims. The rejection for being "improper" was reversed by the Board. As far as being an improper dependent claim under 37 CFR 1.75, the MPEP states as follows at MPEP 608.01 (n) II (page 600-90 Rev 5, Aug 2006):

"Note that although 37 CFR 1.75(c) requires the dependent claims to further limit a preceding claim, this rule does not apply to product-by-process claims." [Emphasis added]

Claims 27, 29, 45 and 59 were also rejected under 35 USC 112, first paragraph as failing to comply with the written description requirement. According to the Examiner, these claims "contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is respectfully traversed.

There is no question that Applicants' original disclosure describes in Claim 27 a "stack of sheets" which has been conditioned. As understood, the rejection is based upon the assertion that although one of ordinary skill would appreciate that Applicants were in possession of the claimed "stack of sheets," such person would not believe that Applicants were also in possession of the ability to provide a single sheet. In fact, the original disclosure does disclose a single sheet – in at least three separate instances. The following statement is made in the subject Application at page 11, starting at line 19:

"Figs 11A, 11B and 11C show more typical examples of individual sheets of a stack that has been conditioned in accordance with the present invention." [Emphasis added]

In view of the forgoing, it is believed that Claims 27, 29, 45 and 46 all comply with all provisions of §112, including the first paragraph.

Claim 27, 29, 45 and 59 were further rejected for being anticipated under §102(b) or, alternatively, for being obvious under §103(a) in view of two different patents: USPNNo. 2,646,726 to Fogg or USPNNo. 1,642,866 to Ackley. These rejections are also respectfully traversed.

When determining the patentability of a product made in accordance with a process, the MPEP provides the following guideline:

"The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is made, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product."[Emphasis added] MPEP 2113

With respect to rejected Claim 27, this claim is directed to a "sheet conditioned in accordance with the method of Claim 26". Claim 26 sets forth a method whereby, among other things, a piercing member is periodically driven into the "edge" of the stack "to engage the stack at a first location" and is then withdrawn "from the first location." This piercing action is in contrast to the rotary cutting action of Fogg where teeth 5 of Fig. VII enter the stack at one side (not the edge) of the stack, pass through the stack and exit the stack at an opposite side. That is also true of the teeth in the Fig. XX apparatus of Fogg. In both cases, the cutting action is intended to remove material so there is no common "first location" as recited in Claim 26.

The "distinctive structural characteristics" of the sheets that are inherently produced in accordance with Applicants' method are schematically illustrated in the typical examples of Figs. 11A, 11B and 11C. The claimed piercing movement produces a splitting action that is generally parallel to the sheet and produces exposed surfaces such as 72A and 72B which greatly facilitate the ability of the sheets, particularly coated sheets, to be reliably bound using conventional adhesive binder strips. Note that a stack subjected to the Fogg method would produce cut regions that are generally *normal* to the surfaces produced by Applicants' method. Thus a stack produced in accordance with Claim 26, or a sheet of that stack, is not the same as that produced by the Fogg apparatus as is apparent from the two differing methods. Thus, the anticipation rejection under §102(b) is not proper.

Given the structural differences between Applicants' sheet and that of Fogg, it is not known how such differences could be considered "obvious" under §103(a). The Examiner has not indicated any manner in which the Fogg method could be modified to produce a conditioned sheet as claimed. Perhaps more importantly, the Examiner has not provided any reason why a person of ordinary skill would make such a modification. Applicants submit that the Fogg method cannot be modified to produce Applicants' claimed sheet, particularly without destroying the primary function of the Fogg method which is trimming and notching the stack edge.

Ackley shows a similar rotary cutter B (Fig. 4) having blades 45 with teeth. As can perhaps best be seen in Fig. 3, the teeth of the cutter enter one side of a stack A, pass through the stack and then exit the stack. An alternative rotary cutter is shown in Fig. 8. Again, one object of this cutting action is to remove material as shown by the grooves (notches) C formed in stack A. Thus, the final stack, and the sheets of the stack, is similar to that of Fogg and differs from the stack and individual sheets produced by Claim 26.

For substantially the same reasons noted above regarding Fogg, it is submitted that the sheet of Claim 27 is neither anticipated nor rendered obvious by Ackley.

Rejected Claim 29 is directed to a "sheet made in accordance with the method of Claim 28, with Claim 28 depending from the previously described Claim 26. Although Claim 28 modifies Claim 26 by specifying further detail regarding the "piercing member", the final conditioned sheet remains similar to that shown in Figs. 11A, 11B and 11C. Thus, for substantially the same reasons noted above regarding Claim 27, it is submitted that the sheet of Claim 29 is patentable over Fogg and Ackley.

Rejected Claim 45 is directed to "a sheet conditioned in accordance with the method of Claim 44" which, in turn, depends from the method of Claim 43. Among other things, Claim 43 recites "periodically driving the piercing members into the edge of the stack substantially exclusively through said edge plane so as to pierce the stack and withdrawing the piercing members from the edge of the stack substantially exclusively through said edge plane a multiplicity of times". This language excludes the cutting action of both Fogg and Ackley where the teeth, for the most part, contact the side of the stack, not the "edge plane", pass through the stack and then exit the stack from the opposite side, again not through the "edge plane". A stack, and a sheet of the stack, conditioned substantially exclusively through the "edge plane" will differ from those conditioned by the prior art cutting action which takes place through the sides of the stack, not the edge. These structural differences are inherent in the differences between the claimed process

and the process disclosed in the prior art. Thus, for reasons similar to those set forth above regarding Claim 27, it is submitted that the sheet of Claim 45 is patentable over Fogg and Ackley.

Rejected Claim 59 is directed to "a sheet conditioned in accordance with the method of Claim 58. Claim 58 is somewhat similar to previously described Claim 43, with Claim 58 also reciting "periodically driving the piercing members into the edge of the stack substantially exclusively through said edge plane so as to pierce the stack and withdrawing the piercing members from the edge of the stack substantially exclusively through said edge plane. Thus, for reasons similar to those set forth above regarding Claim 27, it is submitted that the sheet of Claim 59 is patentable over Fogg and Ackley.

In conclusion, all pending claims are believed to be in condition for allowance and an early allowance is respectfully requested.

Respectfully submitted,  
GIRARD & EQUITZ LLP

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By: 

Philip A. Girard  
Reg. No. 28,848

Attorneys for Applicant(s)

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